GS-602 Medical Officer Series GS-602

This is an individual qualification standard.

Basic Requirements:

Degree: Doctor of Medicine or Doctor of Osteopathy from a school in the United States or Canad a approved by a recognized accrediting body in the year of the applicant's graduation. [A Doctor of Medicine or equivalent degree from a foreign medical school that provided education and medical knowledge substantially equivalent to accredited schools in the United States may be demonstrated by permanen t certification by the Educational Commission for Foreign Medical Graduates (ECFMG) (or a fifth pathway certificate for Americans who completed premedical education in the United States and graduate education in a foreign country).]

Graduate Training: Subsequent to obtaining a Doctor of Medicine or Doctor of Osteopathy degree, a candidate must have had at least 1 year of supervised experience providing direct service in a clinica 1 setting, i.e., a 1-year internship or the first year of a residency program in an institution accredited for such training. (This 1 year of supervised experience may be waived for research or administrative positions not requiring direct patient care.) For purposes of this standard, graduate training programs include only those internship, residency, and fellowship programs that are approved by accrediting bodies recognized within the United States or Canada. Listings of accredited programs are published yearly in the Directory of Residency Training Programs and the Yearbook and Directory of Osteopathic Physicians.

- An internship program involves broadly based clinical practice in which physicians acquir e experience in treating a variety of medical problems under supervision (e.g., internal medicine, surgery, general practice, obstetrics-gynecology, and pediatrics). Such programs are in hospitals or other institutions accredited for internship training by a recognized body of the America n Osteopathic Association (AOA).
- A residency program involves training in a specialized field of medicine in an institution accredited for training in the specialty by a recognized body of the American Medical Association (AMA) or AOA.
- A fellowship program involves advanced training (beyond residency training) in a given medica 1 specialty in either a clinical or research setting in a hospital or other institution accredited in the United States for such training.

Licensure: For positions involving patient care, candidates must have a permanent, full, and unrestricted license to practice medicine in a State, District of Columbia, the Commonwealth of Puerto Rico, or a territory of the United States. Applications will be accepted from physicians who are not currently licensed; however, if selected for appointment, they must (a) obtain a license before entering on duty, or (b) meet one of the following provisions:

- Waiver of Licensure Requirement: An agency may waive the licensure requirement for positions not involving direct patient care, e.g., positions performing disability evaluations, positions performing solely research, or administrative program managers. If the agency does not waive the licens e requirement for these kinds of positions, candidates may be appointed subject to obtaining a license within 1 year.
- Appointments Pending Meeting Licensure Requirement: Individual circumstances may warrant appointments pending meeting the licensure requirement (e.g., when a candidate has a temporar y license to practice until the next regular session of the licensing board). Persons appointed pendin g licensure may not be retained beyond 1 year of appointment if they do not obtain the license.

Applicants who meet the basic requirements qualify for GS-11 positions.

GS-602 (Continued)

Additional Requirements for Grades GS-12 and Above:

The requirements below are grouped according to types of programs-clini cal and training, aviation medical, occupational health, disability evaluation, maternal and child health, and research.

• Clinical and Training Programs-Within Federal clinical and training programs, a distinction is mad e between general practice and specialist positions. General practitioners must be skilled in recognizing various medical pathologies that require referral to specialists for diagnostic and treatment procedures. Graduate training and experience must, t herefore, be well rounded. Specialist positions require graduate training and experience related to the specialty and subspecialty of the position to be filled. Experience may not be substituted for training essential for performing specialized duties. The length and content of residency programs depends upon the specialization and requirements of recognized accreditin g American medical specialty boards. These boards are authorized to conduct examinations to determine the competence of physicians in the specialty, to issue certificates of qualification, to participate i n evaluating the quality of residency programs, and to determine the requirements for certification.

General Practice positions

For GS-12—2 years of graduate training or equivalent experience and training.

For GS-13—3 years of graduate training or equivalent experience and training.

For GS-14 and above—In addition to the requirements for GS-13, 1 year of appropriate experience equivalent to at least the next lower grade level.

Specialist positions

For GS-13—3 years of residency training in the specialty of the position to be filled or equivalen t experience and training.

For GS-14—4 years of residency training in the specialty of the position to be filled or equivalen t experience and training.

For GS-15—5 years of residency training in the specialty of the position to be filled or equivalen t experience and training.

• Disability Evaluation Programs—The knowledge, skills and abilities required for most disability evaluation positions may have been obtained in the primary care field. However, when positions involve evaluating specialized medical cases or developing specialized guides and require training and experience in a specific area of medicine (e.g., general surgery, psyc hiatry, neurology), the require-ments shown above for Specialist positions should be applied.

For GS-12—2 years of graduate training or equivalent training and experience that provided knowledge, skills, and abilities for the work of the position to be filled.

For GS-13 and above—3 years of graduate training or equival ent training and experience that included at least 1 year of experience in a disability evaluation program in government or industry equivalent to at least the next lower grade level.

• Aviation Medical Programs—In addition to a residency in aerospace medicine, knowledge, skills, and abilities for work in this program area may have been acquired in fields such as internal medicine, pulmonary disease, cardiovascular disease, family practice, preventive medicine, occupational health, or public health.

For GS-12—2 years of residency training or equivalent training, education, and experience that provided the skills and knowledge required to perform the work of the position to be filled.

GS-602 (Continued)

For GS-13—3 years of residency training in aerospace medicine or equivalent training, education, and/or experience that included at least 1 year of experience in aviation medical programs.

For GS-14—1 year of appropriate graduate training or experience in aviation or aerospace medica 1 programs equivalent to at least the GS-13 level.

For GS-15—1 year of work experience equivalent to at least the GS-14 level in aviation or aerospace medical programs.

Occupational Health Programs—In addition to a residency program in occupational medicine, knowledge, skills, and abilities for work in this program area may have been acquired in family practice, internal medicine, surgery, pathology, dermatology, radiology, physical medicine and rehabilitation, public health, aerospace medicine, and general preventive medicine.

For GS-12—2 years of residency training or equivalent training, education, and experience that provided the skills and knowledge required to perform the work of the position to be filled.

For GS-13—3 years of residency training in occupational medicine or equivalent training, education, and experience that included at least 1 year of experience in an occupational health program in a n industrial or office-type establishment.

For GS-14 and above—1 year of appropriate graduate training or experience in occupational health programs equivalent to at least the next lower grade level.

• *Maternal and Child Health Programs*—Medical fields that provide the basic knowledge, skills, and abilities for maternal and child health work include pediatrics, obstetrics-gynecology, family practice, and subspecialties of preventive medicine.

For GS-12—2 years of graduate training, education, or appropriate experience that provided the skills and knowledge required to perform the work of the position to be filled.

For GS-13—3 years of graduate training, or equivalent training, education, and experience in a n appropriate field of medicine.

For GS-14 and above—1 year of appropriate experience in maternal and child health program s equivalent to at least the next lower grade level.

• Research Programs—If medical officers in this program area conduct research and have patient care responsibility, they must meet the licensure requirement and the experience and training requirements described in the applicable program area above.

For GS-11—In addition to meeting the minimum educational requirement, applicants must sho w demonstrated interest in and aptitude for medical research work, e.g., activities in medical school, residency, training and fellowships that provided opportunities to demonstrate interest in research.

For GS-12—1 year of medical research experience; or 1 year of graduate training in which the applicant demonstrated interest in and aptitude for medical research; or 1 year of graduate study in an accredited college or university in a field of science (e.g., pathology, pharmacology, physiology, microbiology, biochemistry, zoology) closely related to the work of the position to be filled.

For GS-13—An earned doctorate, e.g., Ph.D. or Sc.D. (in addition to the Doctor of Medicine or Doctor of Osteopathy degree) from an accredited college or university in a field of science directly related to medicine and closely allied to the position to be filled; or, in addition to meeting the requirements for GS-12, 2 years of graduate training or medical research experience that demon-strated ability to do independent major medical research.

For GS-14 and above—One year of experience equivalent to at least the next lower grade level that demonstrated ability to do significant medical research in a particular medical field.

U.S. OFFICE OF PERSONNEL MANAGEMENT

GS-602 (Continued)

EVALUATION OF CANDIDATES

- 1. Interviews: Applicants may be interviewed to assure that they possess the degree of skill in interpersonal relationships required for satisfactory performance of the duties of the position to be filled.
- 2. Substitution of Experience for Residency Training: Experience may not be substituted for residency training that is essential for the performance of specialized duties. For example, specialists such a s psychiatrists and surgeons must complete the number of years of accredited residency training required in their respective specialties. An exception may be made when a peer panel of physicians (subject-matter experts) determines and documents that the knowledge, skills, and abilitie s acquired in professional medical practice are equivalent to those acquired during the same period of time in a graduate training program.
- 3. Teaching Experience: Graduate teaching experience as a member of the faculty in a school of medicine or school of public health may be credited for training positions or as appropriate for specialist positions. (Teaching undertaken as a part of a residency or fellowship training does not satisfy this requirement.)
- 4. Grade Credit for Creative Research Contributions: For positions involving substantial clinical investigations or basic or applied research, extra grade credit may be given for positive evidence or personally performed highly creative or outstanding research leading to major advances in a specific area of research, e.g., development of a basic principle, conce pt, method, approach, technique, or body of basic information that opened the way for major advancements, breakthroughs, or n ew applications. In such cases, candidates who meet the requirements for GS-13 or GS-14 may be rated eligible for the next higher grade.

GS-603

Physician's Assistant Series

GS-603

This is an individual qualification standard.

Basic Requirements:

A broad background of knowledge of the medical environment, practices, and procedures such as would be acquired by a bachelor's degree in a health care occupation such as nursing, medical technology, or physical therapy, or by 3 years of responsible and progressive health care experience such as medical corpsman, nursing assistant, or medical technician; and successful completion of a certificate or diploma program of at least 12 months, including clinical training or preceptorship, specifically designed for professional-caliber physician's assistants that provided the knowledge and ability required to take a detailed medical history, to conduct a physical exam ination, to follow observation procedures, to order and perform diagnostic and therapeutic tasks, and to exercise a degree of judgment in integrating and interpreting findings on the basis of general medical knowledge; or equivalent education and training.

OR

Successful completion of a full 4-year program for physician assistants leading to a bachelor's degree.

The course of study or training must be app roved by a nationally-recognized professional body such as the Committee on Allied Health Education and Accreditation or the Accrediting Bureau of Health Education Schools, or by a panel of physicians established by a Federal agency for this purpose.

Applicants who meet the basic requirements qualify for GS-7.

Additional Requirements for Grades GS-9 and Above:

EDUCATION

Applicants who have completed 3 full years of a curriculum in an accredited medical school leading to the Doctor of Medicine or Doctor or Osteopathy degree may be rated eligible for GS-9.

Applicants who have completed the requirements for the degrees of Doctor of Medicine or Osteopathy, but who lack licensure to practice medicine in the United States, may be rated eligible for GS-11.

OR

EXPERIENCE

One year of specialized experience equivalent to at least the next lower grade level. The require d experience must have demonstrated the ability to perform professional-caliber medical work as a physician's assistant with minimal supervision, including the exercise of a degree of judgment in integrating and interpreting diagnostic findings and in determining the need for referral to a physician.

Evaluation of Experience: Applicants qualifying on the basis of specialized experience must have the following:

- Ability to identify a medical problem and determine appropriate action to meet the problem, including referral to a physician.
- Knowledge and understanding of the environment, principles, ethics, and special human relationships in the field of medicine.
- Knowledge of the medical, biological, and physical sciences related to the applicable area of medicine.
- Knowledge of and ability to perform specified diagnostic and therapeutic practices and procedures.
- Ability to work responsibly with physicians and other members of the medical team, and to dea l effectively with patients.
- Ability to communicate effectively, both orally and in writing.

GS-610 Nurse Series GS-610

This is an individual qualification standard.

Basic Requirements:

Education: Degree or diploma from a professional nursing program approved by the legally designate d State accrediting agency at the time the program was completed by the applicant. (One year of nursin g experience as a military corpsman that has been accepted by a State licensing body may be accepted in lieu of education at the GS-4 level.)

Registration: Applicants must have active, current registration as a professional nurse in a State, District of Columbia, the Commonwealth of Puer to Rico, or a territory of the United States. An applicant who has graduated from an approved nursing educational program within the past 12 months may be appointed pending State registration as a professional nurse within 6 months of appointment. No person appointed pending registration may be retained beyond 6 months, or promoted, if registration has not been attained.

The following table shows the amounts of education and/or experience required to qualify for position s covered by this standard.

GRADE	EDUCATION A	ND/OR	EXPERIENCE
GS-4	Completion of a program of less than 30 months duration or associate degree	s' or	1 year of nursing experience as a military corpsman
GS-5	Completion of a program of less than 30 months duration or associate degree	s' and	1 year of professional nursing, or of at least GS-4 level practical nurse or nursing assistant experience under the supervision of a professional nurse
or	Completion of a program of at least 30 months' duration or 4 academic years above high school bachelor's degree	or	None
GS-7	Completion of a professional nursing program	and	1 year of experience equivalent to at least the GS-5 level
or	1 full year of graduate education <i>or</i> bachelor's degree with superior academic achievement		None
GS-9	2 full years of progressively higher level gradual education or a master's or equivalent degree	ite or	1 year of experience equivalent to at least the GS-7 level
GS-11	Completion of all requirements for a doctoral degree (Ph.D. or equivalent) or 3 full years of progressively higher level graduate education	or	1 year of experience equivalent to at least the GS-9 level
GS-12 and above	None		1 year of experience equivalent to at least the next lower grade level

Equivalent combinations of education and experience are qualifying for all grade levels and positions for which both education and experience are acceptable.

Evaluation of Education: At the GS-5 level, successfully completed undergraduate course work in nursing; the behavioral, physical, or biological sciences related to nur sing; nutrition; public health; and maternal and child health in excess of that required for completion of an associate degree may be substituted for professional nursing experience at the rate of 1 academic year for 9 months of experience. Applicants for Community Health Nurse positions at GS-5 and above must have graduated from a baccalaureate or higher degree nursing program.

GS-610 (Continued)

Graduate-level education must have been in nursing with a concentration in a field of nursing (e.g., teaching, a clinical specialty, research, administration, etc.) or in a closely related non-nursing field directly applicable to the requirements of the position to be filled. Applicants for nurse anesthetist positions at GS-9 and above must have graduated from a course of study for nurses in anesthesia of at least 18 month's duration that was accredited by the American Association of Nurse Anesthetists for the year of their graduation. Applicants for nurse midwife positions must have completed an organized program of study and clinical experience recognized by the American College of Nurse Midwives.

Evaluation of Experience: Experience must have equipped the applicant with the particular knowledge, skills, and abilities to perform successfully the duties of the position. At GS-9 and above, many positions require experience in a specialty area of nursing.

GS-620 Practical Nurse Series GS-620

This is an individual qualification standard.

Basic Requirements:

Licensure: Candidates must be currently licensed to practice as practical or vocational nurses in a State or territory of the United States or the District of Columbia or must have applied for a license to practice. Applications of candidates poss essing a license must be accompanied by a certified or photostatic copy of the license, a notarized statement attesting to the fact, or a citation of the license number and State issuing it. Non-licensed candidates who have completed their training may be appointed subject to obtaining the required license during the probationary period. Those not licensed must furnish the date on which they applied for a license and the jurisdiction involved. No person appointed pending licensure may be retained beyond the probationary period if licensure has not been attained.

Applicants who meet the licensure requirement are considered fully qualified for GS-3.

Additional Requirements for Grades GS-4 and Above:

EXPERIENCE

Qualifying experience includes nursing care work in a hospital, outpatient clinic, nursing home, or other supervised medical, nursing, or patient care facility that provided a practical knowledge of human body structure and sterile techniques and procedures, performing such duties as:

- Providing pre- and post-operative patient care.
- Observing, recording, and reporting changes in behavior of mentally ill patients.
- Providing reassurance and encouragement to mentally ill patients.
- Assisting surgeons and registered nurses in operating room activities, including passing instruments, maintaining sterile conditions, and draping and positioning patients.
- Setting up and operating special medical equipment and apparatus.

For GS-4: 6 months of nursing experience is required.

For GS-5 and above: 1 year of nursing experience equivalent to at least the next lower grade level is required.

OR

EDUCATION/TRAINING

For GS-4: Successful completion of a program in practical nursing of a least 9 months' duration combined with 1 year of nursing assistant experience; or successful completion of a 2-year degree program in a n accredited community college, junior college, or college or university in practical nursing.

GS-621

Nursing Assistant Series

GS-621

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above): Qualifying specialized experience include s nonprofessional nursing care work in a hospital, outpatient clinic, nursing home, or other medical, nursing, or patient care facility, or in such work as that of a home health aid performing duties such as:

- Providing personal nursing care such as providing pre- and post-operative care.
- Support duties for diagnostic and technical treatment procedures, such as setting up and operating special medical equipment and apparatus.
- Caring for mentally ill patients, including observin g, recording, and reporting changes in their behav-ior, and providing reassurance and encouragement.
- Assisting surgeons and registered nurses in operating room activities, including passing instruments, maintaining sterile conditions, and draping and positioning patients.

OR

Education and Training:

For GS-4: Successful completion of a 2-year degree program in an accredited community college, junior college, or college or university in practical nursing or in a field of study appropriate to the specialization of the position, such as education in a program for a psychology, psychiatric, or operating room technician.

GS-622 Medical Supply Aide and Technician Series GS-622

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above): Experience in processing, assembling, trouble-shooting, preparing, sterilizing, storing, and issuing sterile and unsterile medical supplies and equipment. The applicant must possess knowledge of the technical names, general uses, physical characteristics, and operating conditions of medical supply items; knowledge of decontamination, cleaning, preparation, sterilization, and storage procedures; knowledge of aseptic techniques; and skill in operating a washer-sterilizer, ultrasonic instrument cleaners, and gas and steam sterilizers. Examples of qualifying specialized experience include work as an operating room technician, medical instrument technician, nursing assistant, corpsman, or laboratory worker.

OR

Education and Training:

- For GS-3: Successful completion of I year of study that included at least 6 semester hours in courses such as medical supply processing, storage, and distribution; sterile supplies, operating room, and surgical technician courses; or other fields related to the position.
- For GS-4: Successful completion of 2 years of study that included at least 12 semester hours in courses such as those shown above for GS-3.

Successful completion of training provided through schools, hospitals, the military, or employe e development programs of at least 20 classroom hours per week may be substituted for specialize d experience on a week-for-week basis. Such training must have provided the knowledge and skills required to perform the work of the position, such as those described under specialized experience above.

GS-625

Autopsy Assistant Series

GS-625

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above): Experience in work such as an autopsy assistant, morgue attendant, surgical assistant, laboratory assistant, or embalmer's assistant that provided a knowledge of human anatomy, skill in identifying or usi ng surgical instruments, and knowledge of aseptic techniques.

OR

Education and Training:

For GS-3: Successful completion of 1 year of study with at least 6 semester hours in courses such a s biology, human anatomy, physiology, or zoology that included laboratory work.

Applicants may substitute successfully completed training in the Armed Forces that included the subjects of human anatomy, veterinary anatomy, or physiology for up to 3 months of general experience.

GS-630 Dietitian and Nutritionist Series GS-630

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Professional and Scientific Positions."

Basic Requirements: Degree: dietetics, food, nutrition, food service management, institution management, or related science.

Dietitian: For dietitian positions, the curriculum must have been in accordance with the qualifyin g requirements established by The American Dietet ic Association (ADA) in effect at the time of graduation. Information on ADA-approved curricula may be obtained from The American Dietetic Association, 430 North Michigan Avenue, Chicago, Illinois 606 11. (Professional registration as a registered dietitian (R.D.) is evidence of meeting ADA requirements.)

Completion of a coordinated undergraduate program, internship, or other clinical component approved by The American Dietetic Association that was conducted as part of the undergraduate program, or after completion of the basic requirements for a baccalaureate degree, is qualifying at grade GS-7 for dietitians or nutritionists.

Applicants possessing professional registration as a Registered Dietitian meet the requirements for GS-7.

GS-631 Occupational Therapist Series

GS-631

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Professional and Scientific Positions."

Basic Requirements: Degree: Applicants must have completed successfully (1) an occupational therap y curriculum approved by the American Occupational Therapy Association at the time the curriculum was completed, and (2) the clinical affiliation require ments prescribed by the school. The curriculum may have been a bachelor's degree program, a post-baccalaureate certificate program, or an entry-level master' s degree program.

Note: Applicants who have completed an approved curriculum at either the baccalaureate or post -baccalaureate certificate level and who subsequently completed a substantial program of clinical practice of less than 1 year, e.g., 6 months, planned to assure profes sional competence to practice in the occu-pation may be rated eligible for GS-6, rather than GS-5.

GS-633 Physical Therapist Series

GS-633

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Professional and Scientific Positions."

Basic Requirements: Degree: that included or was supplemented by (1) a physical therapy curriculu m approved by a recognized professional accrediting organization at the time the curriculum was completed, and (2) the clinical affiliation requirements prescribed by the school.

Licensure: Applicants must pass a State-administered national examination.

Note: Applicants who have completed an approved curriculum at either the baccalaureate or post baccalaureate certificate level and who subsequently completed a substantial program of clinical practice of less than 1 year, e.g., 6 months, planned to assure profes sional competence to practice in the occu-pation may be rated eligible for GS-6, rather than GS-5.

GS-635 Corrective Therapist Series

GS-635

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Professional and Scientific Positions."

Basic Requirements: Degree: corrective therapy, physical education, or physical therapy.

Note: Applicants who have graduated from an approved curriculum and who subsequently completed a substantial program of clinical practice, e.g., 10 weeks, planned to assure professional competence t o practice in the occupation may be rated eligible for GS-6, rather than GS-5.

Evaluation of Clinical Practice: Clinical practice presently consists of a minimum of 400 clock hours of supervised experience in a Department of Veterans Affairs clinical training program, or in an equivalent training program in a clinical setting under a physician.

GS-636 Rehabilitation Therapy Assistant Series GS-636

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above): Examples of qualifying specialized experience include work as an assistant to one of the specialized therapies such as occupational, physical, manual arts, corrective, or educational therapy; or experience gained as an assistant or aid in patient care, social work, or psychology where the duties involved actual participation in physical medicine and activities of a hospital or clinic.

OR

Education and Training:

For GS-3: Successful completion of 1 year of study.

For GS-4: Successful completion of 2 years of study in a program directly related to the specialized field of therapy.

GS-637 Manual Arts Therapist Series

GS-637

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Professional and Scientific Positions."

Basic Requirements: Degree: industrial arts technology, industrial education, manual arts therapy, vocational rehabilitation/counseling/work adjustment/evaluation.

Note: Applicants who have graduated from an approved curriculum and who subsequently completed a substantial, e.g., 3 months, program of clinical practice planned to assure professional competence t o practice in the occupation may be rated eligible for GS-6, rather than GS-5.

GS-638 Recreation/Creative Arts Therapist Series GS-638

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Professional and Scientific Positions."

Basic Requirements: Degree: recreational therapy or in a creative arts therapy field (art therapy, danc e therapy, music therapy, or psychodrama); or a major in an appropriate subjec t-matter field with thera-peutic emphasis or concentration.

Note: Applicants who have graduated from an approved curriculum in recreational therapy or in a fiel d directly applicable to the specialized creative arts therapy, and who have completed (as part of the degree and/or subsequently) a program of 6 months' (1040 clock hours) clinical practice/practicum planned t o assure professional competence in the particular therapy specialty may be rated eligible for grade GS-6. A degree-related program of clinical practice/practicum involves, as a general rule, a period of 240 clock hours (6 weeks) pre-clinical training in the sophomore year, followed by up to 400 clock hours (10 weeks) of clinical practice/practicum in the junior and/or senior years. This 400 clock hours of degree-relate d practicum may be applied against the 6 months' clinical practice e required for GS-6 eligibility. For example, when an applicant holds a degree that included 400 clock hours of practicum, a postgraduate program of clinical practice of 640 clock hours provides the c ombined total of 1040 clock hours required to qualify for positions at grade GS-6.

Evaluation of Experience: Experience in activities or programs that did not require application of a knowledge of the concepts, principles, and practices of recreational therapy or one of the creative art s therapy specializations covered by this standard, and that did not involve the use of therapeutic approaches to maintain the physical and/or mental health or to achieve the physical and/or mental rehabil-itation of persons, (e.g., Outdoor Recreation Specialist, Commercial Recreation Leader, Vocational Counselor, or other *diversionary*-type recreation specialist positions) is not qualifying for this series.

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GS-639 Educational Therapist Series

GS-639

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Professional and Scientific Positions."

Basic Requirements: Degree: education; or a field applicable to the work, such as occupational therapy or psychology, provided that the curriculum included or was supplemented by at least 12 semester hours in education.

Note: Applicants who have graduated from an approved curriculum and who subsequently completed a substantial, e.g., 6 months, program of clinical practice planned to assure professional competence t o practice in the occupation may be rated eligible for GS-6, rather than GS-5.

GS-640 Health Aid and Technician Series GS-640

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above): Positions in this series range widely in type and include support duties to medical or health personnel such as audiologists, speech pathologists, medical officers, and optometrists. Therefore, technician experience is experience that required application of the knowledge, methods, and techniques of the position to be filled.

OR

Education and Training:

- For GS-3: Successful completion of I year of study that included study in medical, health, or related fields.
- For GS-4: Successful completion of 2 years of study that included at least 12 semester hours in subjects related to the position.
- For GS-5: Successful completion of a full 4-year course of study leading to a bachelor's degree, wit h major study or at least 24 semester hours in subjects directly related to the position.

GS-642 Nuclear Medicine Technician Series GS-642

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

NOTE: Public Law 97-35 requires that persons who administer radiologic procedures meet the credentialing standards in 42 CFR Part 75. Essentially, they must (l) have successfully completed a n educational program that meets or exceeds the standards described in that regulation, and is accredited by an organization recognized by the Department of Education, and (2) be certified as radiographers in their field. The following meet the above requirements:

- (l) Persons employed by the Federal Government as radiologic personnel prior to the effective date of the regulation (January 13, 1986) who show evidence of current or fully satisfactory performance or certification of such from a licensed practitioner such as a doctor of medicine, osteopathy, dentistry, podiatry, or chiropractic who prescribes radiologic procedures to others.
- (2) Persons first employed by the Federal Government as radiologic personnel after the effective date of the regulation who (a) received training from institutions in a State or foreign jurisdiction that did not accredit training in that particular field at the time of graduation, or (b) practiced in a State or foreign jurisdiction that did not license that particular field or did not allow special eligibility to take a licensure examination for those who did not grad uate from an accredited educational program, provided that such persons show evidence of training, experience, and competence as determined by OPM or the employing agency.

All applicants, however, must meet the requirements below.

Specialized Experience (for positions at GS-4 and above): Experience that involved performing nuclear medicine tests and examinations, providing technical support to physicians or other professional nuclear medicine personnel in the diagnosis, care, and treatment of patients, the therapeutic application of radionuclides, and the preparation of radiopharmaceuticals for nuclear medicine research and investigation.

OR

Education and Training:

- For GS-3: Successful completion of 1 year of study that included at least one course in scientific subjects such as radiation biology, anatomy, physiology, nuclear medicine physics, radiation physics, nuclear instrumentation, medical technology, nuclear medicine, radionuclide chemistry, radiopharmacology, or statistics.
- For GS-4: Successful completion of 2 years of study with at least 12 semester hours in any combination of courses such as those shown above for GS-3.
- For GS-5: Successful completion of a full 4-year course of study leading to a bachelor's degree that included major study or at least 24 semester hours in any combination of courses such as those shown above for GS-3.

Successful completion of a training program for nuclear medicine technicians or medical radiolog y technicians is qualifying on a month-for-month basis for up to the l year of specialized experience required for GS-5.

GS-644

Medical Technologist Series

GS-644

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Professional and Scientific Positions."

Basic Requirements:

- A. Degree: medical technology, chemistry, or biology that included or was supplemented by at least:
 - 16 semester hours of biological science of which one course was in microbiology and one course was in immunology. (NOTE: If there is no mention of immunology or immunobiology in the course title, the requirement for a course in immunology may be met by any course that covers the followin g topic areas: (1) definition and relationships of antigens and antibodies; (2) host-antigen interactions; (3) bursal and thymic influences on lymphoid cells; and (4) humoral and cellular respons e mechanisms.) The remaining biology courses must have been in general biology, zoology, or any of the areas listed below under "Evaluation of Education and Experience;"
 - 16 semester hours of chemistry of which one course was in organic or biochemistry. The remaining chemistry courses must have been in general chemistry, qualitative analysis, qualitative chemistry, quantitative chemistry, physical chemistry, analytical chemistry, or any of the areas listed belo w under "Evaluation of Education and Experience;" and
 - 3 semester hours of college mathematics.

OR

B. A full 4-year course of study that included or was supplemented by at least 12 months in a college or hospital-based medical technology program or medical technology school approved by a recognized accrediting organization. The professional medical technology curriculum may have consisted of a 1-year post-baccalaureate certificate program or the last 1 or 2 years of a 4-year program of stud y culminating in a bachelor's in medical technology.

OR

C. A combination of (1) at le ast 35 semester hours of biological science, chemistry, and mathematics as described in paragraph A above and (2) additional appropriate education and/or experience totaling 4 years. This combination of education and experience must have provided knowledge of the theories, principles, and practices of medical technology equivalent to that provided by the full 4-year course of study described in A or B above. All science and mathematics courses must have been acceptable for credit toward meeting the requirements for a science major at an accredited college or university. Acceptable experience is responsible professional or technician experience in a hospital laboratory, health agency, industrial medical laboratory, or pharmaceutical house; or teaching, test development, or medical research program experience that provided an under standing of the methods and techniques applied in performing professional clinical laboratory work. Certification/licensure as a medical technologist (generalist) obtained through written examination by a nationally recognized credentialing agency or State licensing body is a good indication that the quality of experience is acceptable.

Candidates for positions involving highly technical research, development, or similarly complex scientific functions must have completed the full 4-year course of study described in A or B above.

Evaluation of Education and Experience: The four major areas of clinical laboratory science are microbiology, clinical chemistry, hematology, and imm unohematology (blood banking). Qualifying course work in these areas includes bacteriology, mycology, mycobacteriology, tissue culture, virology, parasitology, endocrinology, enzymology, toxicology, urinalysis, coagulation, hemostasis, cell morphology, immunology, serology, immunoserology, immuno-deficiency, hemolysis, histocompatibility, cytogenetics, and similar disciplines or areas of laboratory practice.

GS-644 (Continued)

Related fields include physiology, anatomy, molecular biology, cell biology, embryology, pathology, genetics, pharmacology, histology, cytology, nuclear medicine, epidemiology, biostatistics, infection control, physics, statistics, and similar areas of science where the work is directly related to the position to be filled.

For positions above grade GS-5, experience or graduate education must have been in (1) the general field of medical technology, (2) one of the disciplines or specialized areas of medical technology, or (3) a field directly related and applicable to medical technology or the position to be filled.

Work study experience in a clinical laboratory as a student medical technologist in a CAHEA-accredited education program may be credited on a month-for-month basis toward meeting the GS-7 specialize d experience requirement. (NOTE: A typical program comprises 12 consecutive months of professiona 1 study, including didactic and practical instruction. Approximately 6 to 7 months are devoted to lectures, laboratory study, demonstrations, and seminars covering theory and technique in clinical laboratory science. The other 5 to 6 months are devoted to clinical laboratory rotations. It is the latter, i.e., the period(s) of supervised work experience in a service laboratory that may be credited as work study experience.

GS-645 Medical Technician Series GS-645

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above): (a) Technical medical laboratory support work such as performing laboratory tests and examinations (chemical, microbiologic, hematologic and bloo d banking) and preparing reports of findings or (b) technical support work in a closely related field, e.g., biological laboratory technician work, that required application of the methods and techniques for the position to be filled.

OR

Education and Training:

- For GS-3: Successful completion of (a) a full-time training course of approximately a year's duration in a medical or clinical laboratory assistant (or technician) school that included instruction in chemistry, hematology, blood banking, and microbiology (including serology) and that, in addition, included supervised laboratory practice incident to the diagnostic process and the treatment of patients; or (b) 1 year of s tudy that included at least 6 semester hours in chemistry and/or biological science.
- For GS-4: Successful completion of (a) an associate-degree course of study of which the 2nd year of the 2-year program included successful completion of a training course of approximately a year's duration in a certified laboratory assistant school approved by a nationally recognize d accrediting agency; (b) 1 year of study that included 6 semester hours in chemistry and/or the biological sciences, plus success ful completion of the training course as described in (a) above for GS-3; or (c) 2 years of study that included at least 12 semester hours of chemistry and/or biological science course w ork that must have been directly related to the specialization of the position to be filled.
- For GS-5: Successful completion of a full 4-year course of study leading to a bachelor's degree with major study or at least 24 semester hours in subjects appropriate to the position to be filled.

GS-646 Pathology Technician Series

GS-646

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above): Anatomical pathology technician work in (a) cutting and staining very thin sections of human tissue specimens for microscopic examination; and/or in (b) testing and examining body fluids, etc. for abnormalities in cell structure, depending upon the requirements of the position to be filled.

OR

Education and Training:

- For GS-3: Successful completion of (a) a full-time training course of approximately a year's duration in a medical or clinical laboratory assistant (or technician) school that included instruction i n chemistry, hematology, blood banking, and microbiology (including serology) and that, i n addition, included supervised laboratory practice incident to the diagnostic process and the treatment of patients; or (b) 1 year of s tudy that included at least 6 semester hours in chemistry and/or biological science.
- For GS-4: Successful completion of (a) an associate-degree course of study of which the 2nd year of the 2-year program included successful completion of a training course of approximately a year's duration in a certified laboratory assistant school approved by a nationally recognize d accrediting agency; (b) 1 year of study that included 6 semester hours in chemistry and/or the biological sciences, plus success ful completion of the training course as described in (a) above for GS-3; or (c) 2 years of study that included at least 12 semester hours of chemistry and/or biological science course w ork that must have been directly related to the specialization of the position to be filled.
- For GS-5: (a) Successful completion of a full 4-year course of study leading to a bachelor's degree with major study or at least 24 semester hours in subjects appropriate to the position to be filled; or (b) successful completion of 2 academic ye ars of study that included at least 24 semester hours in chemistry and/or in appropriate fields of biological science and successful completion of a 12-month program of education, training, and supervised experience in cytotechnology or histopathology that has been approved by a nationally recognized accrediting agency.

GS-647 Diagnostic Radiologic Technologist Series GS-647

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

NOTE: Public Law 97-35 requires that persons who administer radiologic procedures meet the credentialing standards in 42 CFR Part 75. Essentially, they must (l) have successfully completed a n educational program that meets or exceeds the standards described in that regulation, and is accredited by an organization recognized by the Department of Education, and (2) be certified as radiographers in their field. The following meet these requirements:

- (l) Persons employed by the Federal Government as radiologic personnel prior to the effective date of the regulation (January 13, 1986) who show evidence of current or fully satisfactory performance or certification of such from a licensed practitioner such as a doctor of medicine, osteopathy, dentistry, podiatry, or chiropractic who prescribes radiologic procedures to others.
- (2) Persons first employed by the Federal Government as radiologic personnel after the effective date of the regulation who (a) received training from institutions in a State or foreign jurisdiction that did not accredit training in that particular field at the time of graduation, or (b) practiced in a State or foreign jurisdiction that did not license that particular field or did not allow special eligibility to take a licensure examination for those who did not grad uate from an accredited educational program, provided that such persons show evidence of training, experience, and competence as determined by OPM or the employing agency.

All applicants, however, must meet the requirements below.

Specialized Experience (for positions at GS-4 and above): Experience in the operation of diagnostic radiology equipment under the direction of radiologists or other medical officers to produce radiographic studies used in medical diagnosis and treatment.

OR

Education and Training: Qualifying educational programs for radiography and radiation therapy technology are available in accredited colleges, universities, hospitals, medical schools, or postsecondary technical or vocational schools. Education or training from programs based in hospitals must have been from thos e hospitals that were accredited at the time of the education or training by the Joint Commission on Accreditation of Hospitals or by the American Osteopathic Association.

- For GS-3: Successful completion of (a) I year of study with at least 6 semester hours in any combination of the following: anatomy, biology, mathematics, chemistry, radiation physics, physiology, pathology, medical terminology, or related courses, or (b) a course for medical technicians, hospital corpsmen, medical service specialists, or hospital training obtained in a trainin g program given by the Armed Forces or the U.S. Maritime Service under close medical and professional supervision.
- For GS-4: Successful completion of a full-time training course of at least 12 months' duration in a post-high school radiography program.
- For GS-5: Successful completion of a full-time training course of at least 24 months' duration in a post-high school radiography program.

Successful completion of a course for medi cal radiologic technicians in the Armed Forces is qualifying on a month-for-month basis up to the 1 year of specialized experience required for GS-5.

GS-648 Therapeutic Radiologic Technologist Series GS-648

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

NOTE: Public Law 97-35 requires that persons who administer radiologic procedures meet the credentialing standards in 42 CFR Part 75. Essentially, they must (l) have successfully completed a n educational program that meets or exceeds the standards described in that regulation, and is accredited by an organization recognized by the Department of Education, and (2) be certified as radiographers in their field. The following meet these requirements:

- (l) Persons employed by the Federal Government as radiologic personnel prior to the effective date of the regulation (January 13, 1986) who show evidence of current or fully satisfactory performance or certification of such from a licensed practitioner such as a doctor of medicine, osteopathy, dentistry, podiatry, or chiropractic who prescribes radiologic procedures to others.
- (2) Persons first employed by the Federal Government as radiologic personnel after the effective date of the regulation who (a) received training from institutions in a State or foreign jurisdiction that did not accredit training in that particular field at the time of graduation, or (b) practiced in a State or foreign jurisdiction that did not license that particular field or did not allow special eligibility to take a licensure examination for those who did not grad uate from an accredited educational program, provided that such persons show evidence of training, experience, and competence as determined by OPM or the employing agency.

All applicants, however, must meet the requirements below.

Specialized Experience (for positions at GS-4 and above): Experience in the operation of therapeutic radiology equipment under the direction of radiotherapists or other medical officers.

OR

Education and Training: Qualifying educational programs for radiography a nd radiation therapy technology are available in accredited coll eges, universities, hospitals, medical schools, or postsecondary technical or vocational schools. Education or training from programs based in hospitals must have been from thos e hospitals that were accredited at the time of the education or training by the Joint Commission o n Accreditation of Hospitals or by the American Osteopathic Association.

- For GS-3: Successful completion of (a) I year of study with at least 6 semester hours in any combination of the following: anatomy, biology, mathematics, chemistry, radiation physics, physiology, pathology, medical terminology, or related courses, or (b) a course for medical technicians, hospital corpsmen, medical service specialists, or hospital training obtained in a training program given by the Armed Forces or the U.S. Maritime Service under close medical and professional supervision.
- For GS-4: Successful completion of a full-time training course of at least 12 months' duration in a post-high school radiation therapy technology program.
- For GS-5: Successful completion of the following type of education or training qualifies for the GS-5 level: (a) a full-time training course in radiation therapy technology of at least 24 months 'duration in a post-high school program (may be a 2-year junior college or a 2-year certificate program); or (b) a full-time course of study in radiation therapy technology of at least 1 2 months' duration in a post-high school program. (Applicants qualifying under (b) must have entered the 1-year certificate program upon completion of a radiography program, a registered nurse program, or upon completion of equivalent course work or training that was accepted as a prerequisite for entry into the radiation therapy technology program); or (c) a 4-year baccalaureate degree program in radiologic technology.

GS-648 (Continued)

Successful completion of a course for therapeutic radiologic technicians in the Armed Forces is qualifying on a month-for-month basis up to the l year of specialized experience required for GS-5.

GS-649 Medical Instrument Technician Series GS-649

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above): Experience in operating, supervising the operation of, or instructing in the operation of equipment related to the particular specialization for which application is made. Experience gained in the operation of equipment in a specialization directly related to the specialization may be credited through the GS-5 level.

Experience gained in the operation of equipment for animal diagnosis or treatment may be credited a s specialized experience for that particular specialization through the GS-5 level.

OR

Education and Training:

- For GS-3: Successful completion of (a) an approved program in practical nursing or in operating room or surgical technician work of at least 9 months in length, or (b) 1 year of study with at least 6 semester hours in any combination of scientific subject s such as biology, anatomy, physi-ology, chemistry, medical technology, or physics.
- For GS-4: Successful completion of 2 years of study that included at least 12 semester hours in an y combination of subjects such as those listed for GS-3. At least 6 of the 12 semester hours of the courses must have been directly related to the specialization of the position.
- For GS-5: Successful completion of a full 4-year cours e of study leading to a bachelor's degree in a major field of study appropriate to the specialization of the position, or that included at least 2 4 semester hours in courses such as those listed for GS-3. Of the 24 semester hours, at least 12 must have been in a field directly related to the specialization of the position.

GS-650 Medical Technical Assistant Series GS-650

There is no OPM qualification standard for positions in this series. If a standard is needed to fill these positions, the employing agency should contact OPM for assistance.

GS-651 Respiratory Therapist Series

GS-651

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above): Qualifying specialized experience must have demonstrated a knowledge of basic equipment used in respiratory therapy and included duties such as:

- Making regular rounds on hospital nursing units to review or collect clinical data to insure that the respiratory equipment is operating properly and in compliance with physicians' orders.
- Transporting, setting up, or testing the operation of and changing simple oxygen administering devices, e.g., masks and nasal cannulas with cylinder or centralized medical gas systems.
- Disassembling, cleaning, assembling, and sterilizing reusable respiratory equipment such as oxyge n analyzers and regulators, including recognizing and reporting variations from expected results.

Examples of qualifying experience include work as a practical nurse, nursing assistant, medical machine aid, medical technician, or respiratory therapy aid if the above duties were performed.

OR

Education and Training:

- For GS-4: Successful completion of a 2-year accredited course of study leading to an associate's degree in respiratory therapy.
- For GS-5: Successful completion of a full 4-year course of study leading to a bachelor's degree in respiratory therapy.

GS-660 Pharmacist Series GS-660

This is an individual qualification standard.

Basic Requirements:

Education: Four-year bachelor's degree in pharmacy recognized by the American Council on Pharma - ceutical Education.

Licensure: Except for research positions that do not entail patient care, all applicants must be licensed to practice pharmacy in a State, territory of the United States, or the District of Columbia.

Applicants who meet the basic requirements qualify for GS-7.

Additional Requirements for Grades GS-9 and Above:

- For GS-9: Successful completion of a 5-year course of study leading to a bachelor's or higher degree in pharmacy from an approved pharmacy school, or 1 year of professional pharmacy experience equivalent to at least GS-7.
- For GS-11: Successful completion of a 6-year course of study leading to a Doctor of Pharmac y (Pharm.D.) degree; 1 year of professional pharmacy experience equivalent to at least GS-9; or, for research positions, completion of all of the requirements for a master's or equivalent degree in a related scientific field.
- For GS-12: One year of professional pharmacy experience equivalent to at least GS-11; or, for research positions, completion of all the requirements for a Ph.D. or equivalent degree in a relate d scientific field.
- For GS-13 and above: One year of professional pharmacy experience equivalent to at least the next lower grade level.

MEDICAL REQUIREMENTS

Applicants must be able to distinguish basic colors.

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GS-661 Pharmacy Technician Series

GS-661

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above): Qualifying specialized experience may have been gained in hospital pharmacies, retail pharmacies, or in pharmaceutical firms or laboratories. Experience must have provided a basic knowledge of:

- Pharmaceutical nomenclature;
- Characteristics, strengths, and dosage forms of pharmaceuticals;
- Pharmaceutical systems of weights and measures; and the
- Variety of procedures and techniques involved in the care, storage, repackaging, bulk compounding, and distribution of pharmaceuticals.

OR

Education and Training:

- For GS-3: Successful completion of 1 year of study that included a course in biology, chemistry, o r physics.
- For GS-4: Successful completion of 2 years of study in pharmacy or pharmacy technology that included at least 12 semester hours in courses in the care, storage, distribution, and preparation of pharmaceuticals, and appropriate laboratory work.
- For GS-5: Successful completion of a full 4-year course of study leading to a bachelor's degree with major study in pharmacy, or that included at least 24 semester hours in pharmacy-related courses.

Successful completion of a course for m edical technicians, hospital corpsmen, medical service specialists, or hospital training obtained in a training program given by the Armed Forces or the U.S. Maritime Service under close medical and professional supervision is creditable on a month-for-month basis for genera 1 experience.

Successful completion of pertine nt specialized training courses in pharmaceutical and pharmacy practices while serving in the Armed Forces is creditable on a month-for-month basis up to the 1 year of specialized experience required for GS-5.

GS-662

Optometrist Series

GS-662

This is an individual qualification standard.

Basic Requirements:

Degree: Doctor of Optometry (O.D.) accredited by the Council on Optometric Education.

Licensure: Current license to practice optometry in a State, the District of Columbia, or a territory i s required, except for those research positions that do not entail patient care responsibilities.

Applicants who meet the basic requirements qualify for GS-9.

Additional Requirements for Grades GS-11 and Above:

For GS-11: One year of professional optometrist experience equivalent to at least GS-9 that demonstrated the ability to perform the work of the position to be filled. For example, for industrial optometrists, the applicant's experience must have demonstrated skill in developing or applying methods, procedures, or devices for protection of employees engaged in eyehazardous work.

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For research positions, completion of all the r equirements for a master's or equivalent degree in a related scientific field such as physics, biology, physiological optics, etc.

For GS-12: One year of professional optometrist experience equivalent to at least GS-11 that demonstrated the ability to perform the work of the position to be filled. For example, for industrial optometrists, the applicant's experience must have demonstrated skill in administering an industrial optometry program in an industrial activity requiring the development of new methods, procedures, or devices for protection employees engaged in eye-hazardous work.

or

For research positions, completion of all the requirements for a Ph.D. or equivalent degree in a related field such as those described above for GS-11.

For GS-13 and above: One year of professional optometrist experience equivalent to at least the next lower grade level.

GS-664 Restoration Technician Series

GS-664

This is an individual qualification standard.

EXPERIENCE AND EDUCATION REQUIREMENTS

General Experience (for GS-5 positions): Three years of general experience (1) as a teacher of art or sculpture at the high school level or above; (2) as a sculpto r whose experience demonstrated the knowledge and ability required to sculpture the various portions of the human anatomy, involved preparation of negative and positive molds, and casts, and provided a knowledge of fabrication in plastics; (3) as a portrait artist whose experience demonstrated the ability to reproduce human likenesses in various color media, such as oil paints, water colors, sepia, etc., and a knowledge of color composition and blending; (4) as a medical illustrator whose experience included making illustrations in monochrome and full color, and preparing moulages, and provided a knowledge of fabrication in plastics; (5) as a commercial artist, color designer, illustrator or graphic artist, scenic artist or one doing similar work of an artistic or illustrative nature where good knowledge of color composition, blending and design was required; or (6) as a dental laboratory technician whose experience involved the design and fabrication of dental appliances, and provided a knowledge of and ability to use modern materials and techniques.

OF

Education (for GS-5 positions): Four years of successfully completed study leading to a bachelor's degree, provided the study included an average of at least 9 semester hours per sc hool year in one or a combination of the following subjects: art sculpture, medical illustration, commercial art, anatomy, or mechanical dentistry.

Specialized Experience (for positions at GS-6 and above): One year of progressively responsible, technical experience equivalent to at least the next lower grade level. It must have included experience (1) in the design, fabrication, and fitting of plastic artificial eyes, ear inserts or facial and body restorations, or (2) in the performance of experimental and developmental work on cosmetic restorative devices, pro-cesses, or techniques. For positions in specialized option s, the experience must have been in the work and techniques of the option for which application is made.

MEDICAL REQUIREMENTS

The duties of most positions require the ability to distinguish either basic or shades of colors; however, there may be a few positions that do not require this ability, and applicants with defective color vision may receive consideration for such positions.

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GS-665 Speech Pathology and Audiology Series GS-665

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Professional and Scientific Positions."

Basic Requirements: Degree: For **speech pathologist** positions, master's degree that included 18 semester hours in the field of speech pathology with approved clinical practice. For **audiologist** positions, master's degree that included 18 semester hours in the field of audiology with approved clinical practice. Applicants for positions with both **speech pathologist and audiologist** duties must have successfully completed all the requirements for a master's degree with 18 semester hours in one of the fields with approved clinical practice and, in addition, must have either completed a minor in the other field or must have had at least 1 year of professional experience in the other field.

Applicants who meet the basic requirements fully qualify for GS-9.

Evaluation of Experience: Experience must have demonstrated breadth and level of knowledge of the principles and theories of speech pathology and/or aud iology; skill in analyzing and interpreting test results in the evaluation of communicative disorders; ability to plan and conduct a program of therap y independently; ability to communicate effectively, orally and in writing; and ability to establish an d maintain effective relationships with individuals and groups in evaluating and resolving problems in hearing, voice, language, or speech. Applicants for the speech pathologist/audiologist combined positions must have had sufficient professional experience in both speech pathology and audiology to demonstrate their competence to perform the duties involved. The following are examples of qualifying professional experience that may have been obtained in a hospital, special treatment center for the disabled, university or community clinic, or industrial or educational institution:

- Investigating and studying the underlying causes, precipitating factors, symptomatic behavior, and the emotional and practical effect upon the patient of a particular impaired speech pattern; resolving speech impairments; and counseling patients and/or families in the adjustment to the speech impairment (for speech pathologist positions).
- Assessing, evaluating, analyzing, and treating communicative handicaps resulting from hearin g impairments (for audiologist positions).
- Investigating methods to improve the clinical management of communicative disorders and to increase the basic scientific understanding of communicative processes and other factors causing their disruption.
- Providing instruction in the principles and bases of communication including clinical techniques and methods of assessment, evaluation, and treatment to audiologists, speech pathologists, and specialists in related fields (such as medical residents in otolaryngology).
- Teaching audiology or speech pathology at the graduate level.

GS-667

Orthotist and Prosthetist Series

GS-667

This is an individual qualification standard.

EXPERIENCE AND EDUCATION/TRAINING REQUIREMENTS

Qualifying experience and training may have been acquired in automotive, electronic, furniture, garment, or woodworking shops or factories, in a hospital or clinical setting, or in the Armed Forces as a medic or mechanic. All applicants must have the ability to:

- Deal with patients' orthotic or prosthetic needs while reco gnizing their emotional and mental outlook and attitudes:
- Accept responsibility as participating members of the health care team, be aware of the ethica l considerations present and the need to adhere to medical ethical practices in all their relationships; and
- Work with professionals and nonprofessionals, and recognize the contribution of each in attaining the objectives of the treatment plan prescribed by a physician or developed by a clinical team.

EXPERIENCE

- For GS-3: Applicants must have 1 year of experience that provided (1) knowledge of or skill in the use of hand or power tools, or of wood, plastics, metal, leather, or other materials used in orthotic or prosthetic devices; or (2) a practical knowledge of the medical environment and procedures related to the care of patients through work such as a nursing assistant, therapy assistant, o r medical aid.
- For GS-4: Applicants must have 1 year of experience that provided familiarity with orthotic or prosthetic work, or skill and knowledge in the use of hand and pow er tools in working with materials used in orthotic or prosthetic devices.
- For GS-5 and above: Applicants must have 1 year of experience equivalent to at least the next lowe r grade level that provided a solid background of:
 - The theories and principles of orthotics or prosthetics;
 - The use of hand and power tools for the development or fabrication of orthotic or prosthetic devices and appliances;
 - The technology of materials commonly used in orthotic or prosthetic appliances; and
 - The measurement of patients, the fabrication and fitting of orthoses or prostheses fro m prescriptions according to recognized and accepted techniques.

OR

EDUCATION/TRAINING

- For GS-3: Successful completion of 1 academic year of post-high school study that included a cours e appropriate to the work such as orthotics, prosthetics, anatomy, psychology, nursing, biology, medical terminology, handicrafts, physical education, or industrial arts education.
- For GS-4: Successful completion of 2 academic years of post-high school study that included courses as described above for GS-3.

Successful completion of apprent iceship training in such trades and crafts as plastics and sheet metal work, machinist, patternmaker, or similar trades and crafts that provided knowledge of the practices, procedures, techniques, and use of the equipm ent and tools meets the educational requirements on a year-for-year basis up through GS-4.

For GS-5: A full 4-year course of study at an accredited college or university leading to a bachelor's degree with major study in prosthetics and orthotics.

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GS-667 (Continued)

For GS-6: A full 4-year course of study at an accredited college or university leading to a bachelor's degree with major study in prosthetics and orthotics, and subsequent successful completion of the clinical affiliation training prescribed by the school to assure professional competence to practice the occupation.

A successfully completed Orthotist-Prosthetist apprenticeship in a facility approved by the American Board for Certification in Orthotics and Prosthetics, Inc. meets in full the requirements for grade GS-6 positions.

TEST REQUIREMENTS

Refer to Section V of this Manual for information about test requirements.

GS-668 Podiatrist Series GS-668

This is an individual qualification standard.

Basic Requirements:

Degree: Doctor of Podiatric Medicine (D.P.M.) from a school of podiatric medicine accredited by the Council on Podiatric Medical Evaluation in the year in which the degree was granted.

Licensure: Applicants must be currently licensed to practice podiatric medicine in one of the States, the District of Columbia, or Puerto Rico.

Applicants who meet the basic requirements qualify for GS-11.

Additional Requirements for Grades GS-12 and Above:

In addition to meeting the basic requirements, applicants must have 1 year of experience equivalent to at least the next lower grade level in the practice of podiatry in an office, clinic, or hospital.

or

For GS-12 positions, 1 year of post-graduate training in a school-affiliated podiatrist's office (preceptorship) or residency is qualifying.

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For GS-13 positions, 2 years of post-graduate training in a school-affiliated podiatrist's office (preceptorship) or residency is qualifying.

GS-669 Medical Records Administration Series GS-669

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

Education: Successfully completed training in an approved school for medical records technicians equates to 1 year of general experience. No credit may be given for partial completion of such training.

Successful completion of a bachelor's degree in a medical records administration educational progra m accredited by the American Health Information Management Association (AHIMA) and the American Medical Association's Committee on Allied Health Education and Accreditation (CAHEA) meets the requirements for GS-5 positions.

Successful completion of the requirements for a bachelor's degree (in any field) and 1 year in a medical records administration educational program accredited by AHIMA and CAHEA meets the requirements for GS-7.

OR

General Experience (for GS-5 positions): Experience in the preparation, maintenance, and management of medical records and health information systems that provided a knowledge of medical terminology, medical records procedures, and medical, administrative, and legal requirements of health care delivery systems.

Specialized Experience (for positions above GS-5): Examples of qualifying specialized experience include:

- Planning, developing, and directing a medical records program for a health care facility that meets both institutional goals and standards of accrediting agencies.
- Evaluating and analyzing the org anization and operation of medical records services, including medical records and indexes, and recommending and/or implementing appropriate revisions and modifications.
- Assisting medical and administrative staff in evaluating the quality and appropriateness of patient and health care services.
- Designing information systems to collect, analyze, monitor, report, and maintain privacy and confidentiality of patient and institutional data for health care related programs, and evaluating and implementing changes to assure the reliability of data.
- Developing and implementing policies and procedures for processing legal medical documents and insurance and correspondence requests in accordance with Federal, State, and local statutes.

GS-670 Health System Administration Series

GS-670

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

Undergraduate and Graduate Education: Major study—hospital administration, public healt h administration, or related fields such as business or public administration with course work in health care administration.

OR

General Experience (for GS-5 positions): Work that required a knowledge of the basic principles and practices related to the management of a health care delivery system. Such experience may have been gained as an administrative officer, management analyst, or administrative or clinical program manager or supervisor in a health care delivery system.

Specialized Experience (for positions above GS-5): Progressively responsible analytical or administrative, or clinical management or supervisory experience in the health care field. This work may have bee n performed in an operating health care facility or a higher organizational echelon with advisory or directional authority over such facilities. Work must have involved a close working relationship with facility managers and analysis and/or coordination of administrative, clinical, or other service activities, and provided knowledge of the following:

- Missions, organizations, programs, and requirements of health care delivery systems;
- Regulations and standards of various regulatory and credentialing groups; and
- Government-wide, agency, and facility systems and requirements in various administrative areas such as budget, personnel, and procurement.

Applicants must also possess:

- Management ability to delegate authority, evaluate and oversee people and programs, recognize an d adapt to changing priorities; and
- Knowledge of the interrelationships and interdependencies among various medical and administrative services and programs.

Special Provision for Inservice Placement: Successful completion of an agency-sponsored on-the-jo b training program may be substituted for qualifying experience, provided it included a formal individualized training plan. Such a training program must have been conducted in an operating health care system and included:

- Assignments providing a knowledge of basic health system administration philosophies, practices, and procedures, and basic government administrative policies and requirements;
- Practical assignments providing an opportunity to apply health system a dministration skills and principles (as the individual progresses, work assignments must be characteristic of the grade level to which he or she is assigned); and
- Oversight by an experienced health system administrator with periodic evaluation of the individual' s progress and appropriate adjustment of the training program.

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GS-671 Health System Specialist Series

GS-671

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

Undergraduate and Graduate Education: Major study—hospital administration, public healt h administration, or related fields such as business or public administration with course work in health care administration.

OR

General Experience (for GS-5 positions): Work that required a knowledge of the basic principles and practices related to the management of a health care delivery system. Such experience may have been gained as an administrative officer, management analyst, or administrative or clinical program manager or supervisor in a health care delivery system.

Specialized Experience (for positions above GS-5): Progressively responsible analytical or administrative, or clinical management or supervisory experience in the health care field. This work may have bee n performed in an operating health care facility or a higher organizational echelon with advisory or directional authority over such facilities. Work must have involved a close working relationship with facility managers and analysis and/or coordination of administrative, clinical, or other service activities, and provided knowledge of the following:

- Missions, organizations, programs, and requirements of health care delivery systems;
- · Regulations and standards of various regulatory and credentialing groups; and
- Government-wide, agency, and facility systems and requirements in various administrative areas such as budget, personnel, and procurement.

Special Provision for Inservice Placement: Successful completion of an agency-sponsored on-the-jo b training program may be substituted for qualifying experience, provided it included a formal individualized training plan. Such a training program must have been conducted in an operating health care system and included:

- Assignments providing a knowledge of basic health system administration philosophies, practices, and procedures, and basic government administrative policies and requirements;
- Practical assignments providing an opportunity to apply health system a dministration skills and principles
 (as the individual progresses, work assignments must be characteristic of the grade level to which he or
 she is assigned); and
- Oversight by an experienced health system administrator with periodic evaluation of the individual' s progress and appropriate adjustment of the training program.

GS-672 Prosthetic Representative Series GS-672

All positions in this series are filled by the Department of Veterans Affairs (VA). Use the "Group Coverage Qualification Standard for Administrative and Management Positions" in conjunction with the VA qualification requirements for these positions.

GS-673 Hospital Housekeeping Management Series GS-673

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

Undergraduate Education: Major study—chemistry or biological sciences, sanitary science or administration, institutional sanitation or administration, hospital administration, hotel administration, public administration, business administration, or other fields related to the position.

Graduate Education: Major study—public health or business administration with emphasis in hospita 1 administration.

OR

General Experience (for GS-5 positions): Examples of qualifying general experience include:

- Work that provided a practical knowledge of supervision and management.
- General administrative work in institutional or building maintenance with responsibility for employing and directing a housekeeping, laundry, or maintenance force; and responsibility for planning wor k schedules on both a short- and long-term basis.
- Performance of administrative duties that included estimating budget requirements, planning expenditures of funds, estimating materials and equipment needs, supervising employees, and recommending personnel actions.
- Teacher in a formal course of instruction related to supervision or management.
- Work that provided a practical knowledge of methods by which bacteria and viruses are spread and of preventive and control measures.

Specialized Experience (for positions above GS-5): Experience in two or more of the following areas, or other work related to the position to be filled:

- Experience that demonstrated a practical working knowledge of the basic principles of chemistry, biology, and bacteriology as applied to environ mental sanitation, infection control, and to the choice and use of antimicrobial agents in the disinfection, sanitization, and/or sterilization of surfaces and equipment.
- Experience in laundry and linen management.
- Experience in interior design management.
- Experience that demonstrated a knowledge of waste management, including the requirements relating to hazardous, toxic, and infectious wastes and provisions for their final disposition.
- Experience that demonstrated a knowledge of pest management, i ncluding alternative methods of control and the selection and application of chemicals.

Other: One year of formalized hospital administrative residency or internship in hospital administration or hospital housekeeping management is equivalent to 1 year of GS-5 level specialized experience.

GS-675 Medical Records Technician Series GS-675

Use the "Group Coverage Qualification Standard for Clerical and Administrative Support Positions."

GS-679 Medical Clerk Series GS-679

Use the "Group Coverage Qualification Standard for Clerical and Administrative Support Positions."

GS-680 Dental Officer Series GS-680

This is an individual qualification standard.

Basic Requirements:

Education: Degree in dental surgery (D.D.S.) or dental medicine (D.M.D.) from a school approved by the Council on Dental Education, American Dental Association (ADA); or other dental school, provided the education and knowledge acquired was substantially equivalent to that of graduates from an ADA-approved school.

Licensure: Applicants must be currently licensed to practice dentistry in a State, the District of Columbia, or Puerto Rico.

Applicants who meet the basic requirements qualify for GS-11.

Additional Requirements for Grades GS-12 and Above:

For purposes of this standard, the following terms are defined.

- *Approved internship; approved residency-*Training in a hospital dental internship or residency approved by the Council on Dental Education of the American Dental Association.
- Graduate-level study—Either dental graduate study leading to an advanced degree such as Master of Science, or postgraduate (nondegree) dental school study involving a level of instruction comparable to that provided in a graduated degree program.
- National certifying board—An examining board in a special area of dental practice recognized by the Council on Dental Education of the American Dental Association.
- *Board eligibility*—Qualification for examination by a nation al certifying board as a result of having met the advanced training program requirements for a dental specialty.

Experience and/or training must be one of the following types:

- Post-licensure professional experience in the general practice of dentistry.
- Approved internship training.
- Approved residency training.
- Graduate-level study in an accredited dental school.
- Post-licensure professional experience in a specialized area of practice.
- Other advanced study or training (outside a dental school or hospital) creditable towards satisfaction of training program requirements for Board eligibility.

For specialist positions, experience and/or training must clearly establish the applicant's status as a specialist. Agencies should review the applicant's experience to determine the types and difficulty of the cases dealt with, the level of knowledge and understanding of the specialization regularly required, the degree of diagnostic skills and treatment planning ability involved, and the pertinent graduate study acquired.

- For GS-12: Two years of professional dentistry experience and/or training; or superior academic ability defined as that demonstrated by an intern, who on the basis of an evaluation of all interns who have completed training in the same hospital or in the same kind of internship program over the past 5 years, would fall into the upper half of the group.
- For GS-13: Three years of professional dentistry experience and/or training equivalent to at least that of a Board eligible.
- For GS-14: One year of professional dentistry experience equiv alent to at least the GS-13 grade level. For specialist positions, certification as a diplomate by a nation al certifying board for a specialized area of practice meets the requirements.
- For GS-15: One year of professional dentistry experience equivalent to at least the GS-14 level.

MEDICAL REQUIREMENTS

Applicants must be able to distinguish shades of color.

TS-2 August 1994

GS-681 Dental Assistant Series GS-681

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

NOTE: Public Law 97-35 requires that persons who administer radiologic procedures meet the credentialing standards in 42 CFR Part 75. Essentially, they must (l) have successfully completed an educational program that meets or exceeds the standards described in that regulation, and is accredited by an organization recognized by the Department of Education, and (2) be certified as radiographers in their field. The following meet these requirements:

- (1) Persons employed by the Federal Government as radiologic personnel prior to the effective date of the regulation (January 13, 1986) who show evidence of current or fully satisfactory performance or certification of such from a licensed practitioner such as a doctor of medicine, osteopathy, dentistry, podiatry, or chiropractic who prescribes radiologic procedures to others.
- (2) Persons first employed by the Federal G overnment as radiologic personnel after the effective date of the regulation who (a) received training from institutions in a State or foreign jurisdiction that did not accredit training in that particular field at the time of graduation, or (b) practiced in a State or foreign jurisdiction that did not license that particular field or did not allow special eligibility to take a licensure examination for those who did not graduate from an accredited educational program, provided such persons sho w evidence of training, experience, and competence, as determined by OPM or the employing agency.

All applicants, however, must meet the requirements below.

Specialized Experience (for positions at GS-4 and above): Experience in dental assistance to general or specialized dentistry, dental assistant (expanded function) work, or any combination of these appropriate to the position being filled.

OR

Education and Training:

- For GS-3: Successful completion of (a) a 1-year dental assistant program or completion of 1 year of a dental hygiene program accredited by the American Dental Association's Commission on Accreditation that included a course in radiation physics; radiation biology; radiation health, safety, and protection; X-ray films and radiographic film quality, radiographic techniques; darkroom and processing techniques; and film mounting; or (b) practical nurse training approved by the appropriate State, territory, or District of Columbia accrediting body.
- For GS-4: Successful completion of a 2-year dental assistant program or completion of a 2-year dental hygiene program accredited by the American Dental Association's Commission on Accreditation that included at least 12 semester hours of courses such as those shown above for GS-3.
- For GS-5: Successful completion of a full 4-year course of study in a dental assistant or dental hygien e program that included at least 24 semester hours in courses as shown above for GS-3.

Special Requirements for GS-5 and above Dental Assistant (Expanded Function): Applicants for Dental Assistant (Expanded Function) positions must have completed ly ear of acceptable course work, preceptorship, or other formal training and/or work assignments specifically designed to equip them with knowledge and skills required to perform intra-oral procedures involved in the position to be filled. Examples of acceptable training are:

- Courses in a dental hygiene or dental assistant program accredited by the American Dental Association's Commission on Accreditation that are directly related to the intra-oral procedures (also referred to a s expanded functions) that are to be performed in the position to be filled.
- U.S. Army's Dental Therapy Assistant Training Program.
- Continuing education courses in expanded functions for dental assistants offered by the Indian Healt h Service of the Department of Health and Human Services.
- Other training comparable to the above in private or governmental h ospitals, clinics, or schools that included formal classroom instruction and clinical training in the knowledge and skills required to perform intra-oral procedures in the position to be filled.

GS-682

Dental Hygiene Series

GS-682

This is an individual qualification standard.

Basic Requirements:

Licensure: Applicants for all grade levels and specializations must be currently licensed to practice as dental hygienists in a State or territory of the United States or the District of Columbia.

NOTE: Public Law 97-35 requires that persons who administer radiologic procedures meet the credentialing standards in 42 CFR Part 75. Essentially, they must (l) have successfully completed an educational program that meets or exceeds the standards described in that regulation, and is accredited by an organization recognized by the Department of Education, and (2) be certified as radiographers in their field. The following meet these requirements:

- (1) Persons employed by the Federal Government as radiologic personnel prior to the effective date of the regulation (January 13, 1986) who show evidence of current or fully satisfactory performance or certification of such from a licensed practitioner such as a doctor of medicine, osteopathy, dentistry, podiatry, or chiropractic who prescribes radiologic procedures to others.
- (2) Persons first employed by the Federal Government as radiologic personnel after the effective date of the regulation who (a) received training from institutions in a State or foreign jurisdiction that did not accredit training in that particular field at the time of graduation, or (b) practiced in a State or foreign jurisdiction that did not license that particular field or did not allow speci al eligibility to take a licensure examination for those who did not graduate from an accredited educational program, provided that such persons show evidence of training, experience, and competence as determined by OPM or the employing agency.

The following table shows the amounts of educati on and/or experience required to qualify for positions covered by this standard.

GRADE	EDUCATION OR EXPER	IENCE
GS-4	None	None
GS-5 Clinical Dental Hygienists	4-year course of study leading to a bachelor's degree in dental hygiene or in a directly related field of study	1 year of experience as a licensed dental hygienist
Community Health Dental Hygienists	4-year course of study leading to a bachelor's degree, which included or was supplemented by a curriculum in dental hygiene; <i>or</i>	None
	 Dental hygiene curriculum, plus appropriate experience, totaling 4 years	
GS-6 Clinical Dental Hygienists	None	1 year of experience equivalent to at least the GS-5 level
GS-7 Clinical Dental Hygienists	None	1 year of experience equivalent to at least the GS-6 level
Community Health Dental Hygienists	1 year of graduate education in dental hygiene or in a directly related field of study	1 year of experience equivalent to at least the GS-5 level
GS-8 Clinical Dental Hygienists	None	1 year of experience equivalent to at least the GS-7 level
GS-9 Community Health Dental Hygienists	2 years of progressively higher level graduate education or a Master's or equivalent degree in dental hygiene or a directly related field of study	1 year of experience equivalent to at least the GS-7 level
GS-11 and above	None	1 year of experience equivalent to at least the next lower grade level

Equivalent combinations of education and experience are qualifying for all grade levels and positions for which both education and experience are acceptable.

U.S. OFFICE OF PERSONNEL MANAGEMENT

GS-682 (Continued)

Evaluation of Education: The academic curriculum in dental hygiene must have been accredited by the Commission on Dental Accreditation, American Dental Association.

Evaluation of Experience: When combining experience and education, appropri ate supplemental experience for entry level Community Health Dental Hygienist must have demonstrated the ability to:

- Plan and direct group activities.
- Organize, analyze, and evaluate data, draw conclusions, and make decisions or recommendations.
- Express ideas and communicate information orally and in writing in a clear, logical, and motivatin g manner.
- Demonstrate and/or present new ideas, techniques, and procedures.
- Conduct meetings and present lectures.
- Deal effectively with individuals and groups.

Examples of work that may have provided this experience include work as a teacher, recreation leader, or leader in a community or professional organization.

Evaluation of Specialized Experience: Qualifying experience for clinical dental hygienists include s experience in performing oral prophylactic care and in providing oral health educational services t o patients. Additionally, at the higher grade levels, qualifying experience includes (1) performing advanced oral prophylactic, therapeutic, and preventive procedures in cases of periodontal diseases or inflammation or on patients with other medical or dental problems, (2) placing temporary fillings, and (3) finishin g amalgam restorations. Applicants for positions involving the use of X-rays must have had experience in taking and interpreting X-rays.

Qualifying experience for community health dental hygienists includes experience in preparing an d conducting educational lectures and demonstrations on dental hygiene, planning public health programs, providing advice and policy guidance to dental personnel on public health matters, and recommendin g improved methods of dental hygiene.

GS-683 Dental Laboratory Aid and Technician Series GS-683

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above: Examples of qualifying specialized experience include:

- Use of dental laboratory material such as impression materials, plasters, stones, hydrocolloids, waxes, metals, acrylics, porcelain, and similar materials.
- Use of laboratory equipment such as hand tools, dental lathes, engi nes, and hand pieces, furnaces, casting machines, presses, flasks, and related equipment.
- Use of precision instruments such as articulators, surveyors, and microanalyzers.
- Construction of dental prosthetic appliances.

OR

Education and Training:

- For GS-3: Successful completion of the first full year (9 months) of the 2-year program of study and training in dental technology in a school for dental laboratory technicians approved by the Council on Dental Education of the American Dental Association.
- For GS-4: Successful completion of a full 2-year program (18 months) of study and training in denta 1 technology as described above for GS-3.
- For GS-5: Successful completion of an approved apprentic eship program consisting of at least 2000 hours a year for 3 years.
- For GS-6: Successful completion of a full 4-year apprenti ceship program consisting of at least 2000 hours a year.

The successful completion of training courses in dental laboratory work in the Armed Forces or othe r Federal agencies will be allowed appropriate credit for specialized experience on a month-for-month basis up through GS-5.

Licensed professional dentists will be considered qualified for any grade level if they have, in the aggregate, the required experience in dental laboratory procedures.

GS-685 Public Health Program Specialist Series

GS-685

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

Undergraduate and Graduate Education:

For GS-5/7: Major study—any field.

For GS-9/11: Major study—public health or other field of study with course work directly related to the work of the position to be filled.

OR

General Experience (for GS-5 positions): Experience that provided evidence that the applicant has the potential to learn and perform public health program work, including the abilities to:

- Collect and evaluate facts.
- Interpret and apply guidelines and specifications.
- Use analytical methods and processes to draw conclusions.
- Express ideas and concepts orally, in writing, and by numeric and graphic means.
- Deal effectively with people.

Specialized Experience (for positions above GS-5): Experience that provided:

- Knowledge of organizational, operational, and programmatic concepts and practices applied by public, private, or nonprofit agencies and organizations engaged in public health or other health-relate d activities.
- Knowledge of the methods, processes, and techniques used to develop and deliver public health o r health-related programs in State and local settings.
- Knowledge of a specialized public health program.
- Knowledge of, and skill in, the application of administrative or analytical methods and technique s necessary for working within the framework of a public health or related organization and carrying out specific program functions.
- Skill in oral and written communications, gathering and conveying information, making oral presentations, and preparing reports, correspondence, and other written materials.

Examples of qualifying specialized experience include:

- Public Health Advisor positions—providing advice and assistance to State and local governments, and to various public, nonprofit, and private agencies and organizations on matters relating to the improvement of their public health activities.
- *Public Health Analyst positions*—conducting studies and performing other analytical work related to the planning, development, organization, administration, evaluation, and delivery of public health programs.

GS-688 Sanitarian Series GS-688

This is an individual qualification standard.

Basic Requirements:

Education (for GS-5 positions): A full 4-year course of study that meets all the requirements for a bachelor's degree, and that included or was supplemented by at least 30 semester hours in a science or any combination of sciences directly related to environmental health (such as sanitary science, public health, chemistry, microbiology, or any appropriate agricultural, biological, or physical science).

OR

Experience (for GS-5 positions): Four years of experience in inspectional, investigational, technica l support, or other responsible work that provided a knowledge and a fundamental understanding of, and the ability to use, environmental health principles, methods, and techniques equivalent to that which would have been gained through a 4-year college curriculum.

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A combination of education and experience as described above.

Additional Requirements for Grades GS-7 and Above:

In addition to meeting the basic requirements, applic ants for positions at grades GS-7 and above must have the amounts of education and/or experience required for the grade level as shown in the following table.

GRADE	EDUCATION OR	EXPERIENCE
GS-7	1 full year of graduate level education related to environmental health <i>or</i> superior academic achievement	1 year of experience equivalent to at least the GS-5 level
GS-9	2 full years of progressively higher level graduate education <i>or</i> master's or equivalent graduate degree related to environmental health	1 year of experience equivalent to at least the GS-7 level
GS-11	Completion of all requirements for a doctoral degree (Ph.D., M.D., or equivalent) <i>or</i> 3 full academic years of progressively higher level graduate education	1 year of experience equivalent to at least the GS-9 level
GS-12 and above	None	1 year of experience equivalent to at least the next lower grade level

Equivalent combinations of education and experience are qualifying for all grade levels for which both education and experience are acceptable.

Evaluation of Education: Examples of qualifying education related to environmental health include study in such fields as sanitary science, public health, chemistry, microbiology, or agricultural, biological, or physical sciences appropriate to the position to be filled.

Evaluation of Experience: Qualifying specialized experience is experience in developing, evaluating, and advising on programs designed to prevent and eliminate environmental health hazards. Examples o f qualifying specialized experience include analyzing substances to determine contamination or the presence of disease, or resolving environmental health problems through collection, tabulation, and evaluation o f environmental sanitation data and development and implementation of plans to eliminate or contro l environmental health hazards.

GS-690

Industrial Hygiene Series

GS-690

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Professional and Scientific Positions."

Basic Requirements:

A. Degree: industrial hygiene; or a branch of engineering, physical science, or life science that included 12 semester hours in chemistry, including organic chemistry, and 18 additional semester hours of courses in any combination of chemistry, physics, engineering, health physics, environmental health, biostatistics, biology, physiology, toxicology, epidemiology, or industrial hygiene. Courses in the history or teaching of chemistry are not acceptable.

OR

B. Combination of education and experience—at least 12 semester hours of course work in chemistry, including organic chemistry, and 18 additional semester hours as specified in A above, plus appropriate experience or additional education.

Evaluation of Education: All science or engineering courses offered in fulfillment of the above requirements must be acceptable for credit toward the completion of a standard 4-year professional curriculum leading to a bachelor's degree in science or engineering at an accredited college or university.

Evaluation of Experience: Qualifying experience may have been obtained in field, laboratory, engineering, or other environment if the work provided a means of obtaining a professional knowledge of the theory and application of the principles of industrial hygiene and closely related sciences such as physics and engineering controls. Such work must have involved experience in all of the following areas: the acquisition of quantitative and qualitative data, and the measurement of exposures for a variety of chemical, physical, and biological stresses; the analysis of the data acquired and the prediction of probable effects of exposures on the health and well-being of workers; and the selection and recommendation of appropriate controls, including management, medical, engineering, education or training, and personal protective equipment.

GS-696

Consumer Safety Series

GS-696

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Professional and Scientific Positions."

Basic Requirements:

A. Degree: that included at least 30 semester hours in one or a combination of the following: biological sciences, chemistry, pharmacy, physical sciences, food technology, nutrition, medical science, engineering, epidemiology, veterinary medical science, or related scientific fields that provide d knowledge directly related to consumer safety officer work. The 30 semester hours can include up to 8 semester hours in statistics, or course work that included the principles, theory, or practical application of computers or computer programming.

OR

B. Combination of education and experience—courses consisting of at least 30 semester hours in the fields of study described in A above, plus appropriate experience or additional education.

GS-698 Environmental Health Technician Series GS-698

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience (for positions at GS-4 and above): Experience that involved identifying, preventing, or eliminating health hazards in one or more areas of environmental sanitation. Such experience must have provided a practical knowledge of environmental health hazards, survey techniques, and control and eradication methods, and may have been gain ed in work such as biological technician, medical technician, pest control technician, quality control positions with dairy or food service industries, or environmental health worker.

Journey level experience in a trade or craft may be credited as specialized experience when the work was closely associated with and provided the required know ledge of environmental health techniques, methods, and skills, e.g., pest control operator, waterplant operator.

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Education and Training:

- For GS-3: Successful completion of 1 year of study.
- For GS-4: Successful completion of 2 years of study that included at least 12 semester hours in an y combination of courses in the health, agricultural, biological, or physical sciences.
- For GS-5: Successful completion of a full 4-year course of study leading to a bachelor's degree with major study or at least 24 semester hours in any combination of courses in subjects such as thos e shown above for GS-4.

GS-699 Medical and Health Student Trainee Series GS-699

Use the "Group Coverage Qualification Standard for Competitive Service Student Trainee Positions," as appropriate to the appointing authority used.